II. Remarks

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-30 are pending in the application. Claims 1, 9, 15, 18, and 21 are independent claims. In response to a restriction requirement, Claims 31-33 have been cancelled without prejudice or disclaimer. Applicant hereby affirms the election to prosecute Claims 1-30 without traverse of the restriction requirement. However, Applicant expressly reserves the right to pursue the cancelled claims in a continuation application.

Each of Claims 1, 9, 15, 18, and 21 has been amended to recite the feature of the frame grabber module that is coupled to the second device and that is configured to capture the second data from the second device without substantially modifying any underlying hardware or software processes in the second device. Support for this amendment may be found, for example, in paragraph 0011 of the specification. Therefore, no new matter has been added.

In the December 27, 2006 Office Action, Claims 1-30 are rejected as allegedly being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,871,013 to Wainer, et al. ("Wainer"), for the reasons provided at pages 4-9 of the Office Action. This rejection is traversed.

Wainer discloses a method of registering a function image to a structural diagnostic image. The Wainer method includes the steps of providing a functional emission nuclear image of a patient as a functional image; providing a first structural image of said patient; and providing a second structural image which includes a nuclear medicine image and which has a known positional relationship to said first structural image. The Wainer method also includes the steps of finding a first mapping transformation between said first and second structural

images; determining a second mapping transformation between said functional image and said first structural image based on said first mapping transformation and said known positional relationship; and gating at least said functional image to at least one of a patient's body rhythms.

Independent Claim 1 has been amended to recite the feature of a frame grabber module coupled to the second device, the frame grabber module being configured to capture the second data from the second device without substantially modifying any underlying hardware or software processes in the second device. As described at paragraph 0011 and item 130 of Figure 1 of the present application, the method of the present invention involves "frame grabber" circuitry to capture the image data directly from the output port of the second device, i.e., to obtain the second image data in a streaming, real-time sense to perform any desired signal processing functions on the streaming video data using the frame grabber circuitry, and then to directly combine the two images, instead of obtaining a second image data set and taking it offline to perform signal processing prior to combining the processed second image data with the first image data set. Accordingly, this feature provides the present invention with the advantage of using the frame grabber module to capture the second data from the second device without substantial modification of any underlying hardware or software processes in the second device, given that substantial modification of medical devices may affect the validation of such devices by regulatory bodies, such as, for example, the United States Food and Drug Administration (FDA).

By contrast, Wainer fails to disclose the use of a frame grabber module or other similar means to capture the second data without the need to substantially modify any underlying hardware or software processes. In the method of Wainer, as described, for example, at column 5, line 50 through column 6, line 4, several signal processing steps are executed in order to

transform a SPTCT structural image, which has an associated STET image, so that it is registered to a structural image. For example, this transformation may include simple alignment of the images, scaling of one of the images, and/or warping of one of the images. This is quite different from the recited frame grabber feature of the present invention, which operates directly on streaming video data using the frame grabber circuitry, and in this manner is able to process the second data in near-real time. Accordingly, in the method described in Wainer, there is no frame grabber circuitry to directly capture the image data from the output port of the second device and process it in real time as it is being sent to be combined with the first data set.

Therefore, because independent claim 1 includes the feature of the frame grabber module that is configured to capture the second data without substantially modifying the hardware or software processes of the second device, and because Wainer fails to disclose this feature, Applicant submits that independent claim 1 is patentable over Wainer. Furthermore, independent Claims 9, 15, 18, and 21 have also been amended to recite this feature of the present invention. Accordingly, each of these independent claims is also patentable with respect to Wainer for the same reasons as those discussed above with respect to independent Claim 1. In addition, each of dependent Claims 2-8, 10-14, 16, 17, 19, 20, and 22-29 depends from one of the aforementioned independent claims, and therefore, each of these dependent claims also is patentable with respect to Wainer for the same reasons as those discussed above.

It is believed that this application is now in condition for allowance, and a Notice thereof is respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3500. All correspondence should continue to be directed to our address given below.

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